

REMARKS/ARGUMENTS/ELECTION

Claims 1, 22, 33, 35, and 61 are amended, and claims 12, 15, 23-29, 34, 52-60, 65, and 74-80 are now or were previously canceled. Claims 1-11, 13, 14, 16-22, 30-33, 35-51, 61-64, 66-73, and 81-84 are now pending in the application, although claims 9, 11, 16-21, 43, 44, 64, and 68 are withdrawn from consideration as directed to a non-elected species. Applicants respectfully request reexamination and reconsideration of the application as amended.

Initially, Applicants acknowledge with appreciation the Examiner's indication that claims 33, 41, 45-51, and 65 are allowable over the prior art of record. Claim 33 has been rewritten in independent form to include the limitations of the base claim and all intervening claims; claim 41 is an independent claim; and claim 61 has been amended to include the limitations of claim 65. Claims 33, 41, and 61 should therefore be allowable over the prior art of record. Claims 42-51, 68, and 69 depend from claim 41 and should therefore also be allowable. Similarly, claims 62-64, 66, 67, and 81-84 depend from claim 61 and should therefore also be allowable. Applicants note that claims 43, 44, 64, and 68 are withdrawn as directed to a non-elected species but request that those claims be rejoined because of their dependency on allowed linking claim 41. (See MPEP § 809, pg. 800-48.)

Claim 16 was objected to as depending from a canceled claim. Applicants note that claim 16 is currently withdrawn as directed to a non-elected species. If claim 16 is rejoined, Applicants will amend claim 16 and change its dependency to claim 1.

Claims 1-8, 10-15, 17-51, 61-63, 65-67, and 69-84 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,811,406. Applicants do not traverse this rejection and will file a terminal disclaimer. To avoid unnecessarily paying the fee associated with a terminal disclaimer, however, Applicants would prefer to wait to file the terminal disclaimer until all other issues of patentability are resolved.

Claims 1-8, 10, 13, 14, 21, 30-32, 35-40, 61-63, 66, and 67 were rejected under 35 USC § 103(a) as obvious in view of U.S. Patent No. 4,615,573 to White et al. ("White"), U.S. Patent No. 5,632,631 to Fjelstad et al. ("Fjelstad"), U.S. Patent No. 5,914,614 to Beaman et al. ("Beaman 614"), U.S. Patent No. 4,262,479 to Hosoi et al. ("Hosoi"), and U.S. Patent No. 5,773,889 to Love et al. ("Love"). Claims 70-73, 77-80, and 81-84 were rejected under 35 USC § 103(a) as obvious in view of White, U.S. Patent No. 6,525,551 to Beaman et al. ("Beaman

551"), Hosoi, and Love. Claims 22-29 and 74-76 were rejected under 35 USC § 103(a) as obvious in view of U.S. Patent No. 6,441,315 to Eldridge et al. ("Eldridge") and U.S. Patent No. 5,067,007 to Kanji et al. ("Kanji"). Claims 1, 3, 4, 6-8, 10, 12, 22-30, 70-74, and 74-76 were rejected under 35 USC § 102(e) as anticipated by or under 35 USC § 103(a) as obvious in view of Beaman 551. Applicants respectfully traverse these rejections.

Independent claim 1 has been amended to include the features of claim 12, which was rejected only in view of Beaman 551. Claim 1 includes "a plurality of *substantially rigid* column elements." In contrast, wires 15 in Beaman 551 are not rigid but are "elastic and compliant." Indeed, wires 15 are so elastic and compliant—i.e., not rigid—that an alignment mask 51 limiting movement of the wires 15 "is essential to prevent plastic deformation of the probe wires." (Beaman 551 col. 4, line 42 through col. 5, line 18.) Beaman 551 thus neither teaches nor suggests column elements that are "substantially rigid," as required by claim 1. For this reason alone, claim 1 patentably distinguishes over Beaman 551.

Claim 1 also requires that a "contact element" be "joined to second end of each of [a plurality of] column elements." The ball shaped contact 61 in Beaman 551 is joined to only one wire 15—not to a plurality of wires 15 as would be required to meet the description in claim 1. (See, e.g., Beaman 551 Figure 8.) Nor is there any reason to join one ball shaped contact 61 to more than one wire 15. Indeed, it would not appear possible to do so. Beaman 551 thus also fails to teach or suggest *a single* contact element joined to *a plurality* of column elements, as required by claim 1. For this additional reason, claim 1 patentably distinguishes over Beaman 551.

Claims 2-11, 13, 14, 16-21, 30-32, and 70-73 depend from claim 1 and are therefore also patentable. Applicants note that claims 9, 11, and 16-21 are withdrawn as directed to a non-elected invention but request that those claims be rejoined because of their dependency on now presumably allowable linking claim 1. (See MPEP § 809, pg. 800-48.)

As stated above, independent claim 22 was rejected as obvious in view of the combination of Eldridge and Kanji and as anticipated by Beaman 551. Claim 22, however, is fully supported by parent application 08/819,464 (hereinafter "the Parent"), which was filed March 17, 1997 and thus predates the filing dates of Eldridge and Beaman 551. Figure 7F of the Parent (a divisional of which has been published as US Patent Application Publication 2003/0199179) fully supports claim 22. Specifically, element 730 in Figure 7F of the Parent

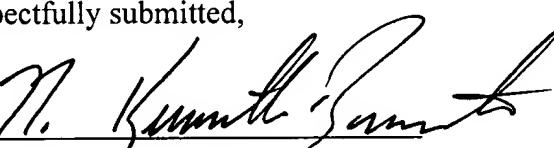
provides an example of the column element of claim 22 of the instant application, and element 720 in Figure 7F provides an example of the contact element of claim 22. Because Eldridge and Beaman 551 are thus not prior art to claim 22, claim 22 is allowable over the prior art of record.

As mentioned above, independent claim 35 was rejected in view of the combination of White and Love. Claim 35 describes a spring contact structure that comprises a beam joined to each of "at least two substantially rigid column elements." Claim 35 further states that the top of one of the column elements is positioned between the top of the other column element and a contact tip region of the beam. Neither White nor Love, whether taken singly or in combination, discloses a spring contact structure comprising a beam joined to "at least two" column elements. Nor is there any suggestion or reason to modify White or Love to join one beam to at least two column elements. Indeed, the pronounced downward bowing of White's beam 14 shown immediately to the right of post 30 in Figures 1 and 2 of White suggests that there is no place for a second post 30 in White's contact structure.

Claim 35 thus patentably distinguishes over White and Love. Claims 36-40 depend from claim 35 and are therefore also patentable.

In light of the foregoing, Applicants assert that—other than the need for a terminal disclaimer to overcome the double patenting rejection—all claims are allowable and the application is in condition for allowance. If at any time the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 323-5934.

Respectfully submitted,

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Date: March 22, 2005

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